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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,626	07/28/2003	Evan R. Mapoles	58159.US	5819
60838	7590	05/03/2006	EXAMINER	
LNG/KLA JOINT CUSTOMER C/O LUEDEKA, NEELY & GRAHAM, P.C. P.O. BOX 1871 KNOXVILLE, TN 37901			NGUYEN, TU T	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/628,626

Applicant(s)

MAPOLES ET AL.

Examiner

Tu T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07/28/2003
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Claim Objections

Claim 10 is objected to because of the following informalities:

1) Claim 10, line 1, "the method of claim 8" should be changed to "the method of claim 9".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (Specification, pages 2-15) (AAPA hereinafter) in view of Jasper et al (6,674,510) and Finarov (6,038,029).

With respect to claims 1,9-10, AAPA disclose an integrated inspection system adapted to inspect a substrate. The inspection system comprising: a first inspection station adapted to perform a first inspection of the substrate at a first resolution and for identifying defect candidate sites (AAPA, page 2, lines 20-24), a second inspection station adapted to perform a second inspection of the defect candidate sites at a second resolution, where the second resolution is higher than the first resolution (AAPA, page 2, lines 25-28; page 3, lines 1-8).

AAPA does not explicitly disclose the first inspection station disposed at a first known location, a second station disposed at a second known location, a controller, a substrate stage adapted to move the substrate between the first known location of the first inspection station and the second known location of the second inspection station. Jasper discloses a system for inspecting a substrate. The system comprises: a substrate stage (column 2, lines 58-62) adapted to move the substrate between the first known location of the first inspection station and the second known location of the second inspection station (column 6, lines 35-42, Jasper discloses that the stage could be used for multiple measurement stations), a controller (a position system, column 2, line 58). It would have been obvious to modify AAPA with the substrate stage and a controller taught by Jasper to facilitate the measuring.

Jasper does not explicitly disclose a stage to move the substrate under both inspection stations. Finarov discloses a stage 110 (fig 7A) for moving the substrate under different measuring systems. It would have been obvious to modify Jasper stage with the stage taught by Finarov to perform different measuring processes without transferring the substrate to reduce loss of accuracy as taught by Finarov in column 2, lines 10-25).

With respect to claims 2-3, AAPA discloses using an optical inspection system for the first station and a microscope for a second station (Specification, page 2, last paragraph and page 3, first paragraph).

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With respect to claims 4-7, 11-14, 18-20, the claimed microscopes would have been known. It would have been obvious to modify AAPA with different types of microscope for different measuring purposes.

With respect to claims 8, 15, Jasper does not explicitly disclose the distance between the stations. However, according to fig 8, the distance between the stations 20a and 10 seems to be fixed. Further, It would have been obvious to modify Jasper by having a known distance between the stations in order to move the substrate between the stations easier.

With respect to claim 16, refer to discussion in claim 1 above for the system. Further, AAPA discloses classifying the defects by the second system (page 2, lines 25-28).

With respect to claim 17, refer to discussion claim 1 above for the controller.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu T. Nguyen whose telephone number is (571) 272-2424. The examiner can normally be reached on T-F 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley Jr. can be reached on (571) 272-2800 Ext. 77. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Tu T. Nguyen', with a long, sweeping horizontal line extending to the right.

Tu T. Nguyen
Primary Examiner
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04/25/2006